

ABSTRACT

A broadband amplification apparatus for extending a bandwidth includes a first and a second amplifying unit for amplifying an input signal, a buffering unit and a first inductive buffer. The buffering unit disposed between the first and the second amplifying unit buffers an output signal of the first amplifying unit to thereby maintain a bandwidth of the output signal, increases a gain and returns back a portion of the buffered signal to the first amplifying unit. The first inductive buffer, which is connected to the buffer unit, enhances input impedance as a frequency increases within a predetermined range, thereby introducing little gain changes while serving to extend a bandwidth.